INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26125

A. CLASSIFICATION OF SUBJECT MATTER			
IPC(7) : C12N 15/89; C12M 3/00 US CL : 435/29,287.1			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols) U.S.: 435/29, 30, 459, 460, 470, 173.6, 285.1, 285.2, 287.1, 288.5, 309.1			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			D. L. L. L. D. L.
Category *	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No. 1-8, 13-15, 17-23, 26,
X 	US 6,368,851 B1 (BAUMANN et al.) 09 April 2002 (09.04.2002), see entire document.		
Y			9-12, 16, 24, 25, 27, 28, 31-86
Y	WO 00/20554 A1 (GARMAN et al.) 13 April 2000 (13.04.2000), see entire document.		1-86
Y, P US 2003/0153067 A1 (STETT et al.) 14 August 2003		3 (14.08.2003), see entire document.	1-86
A US 6,193,647 B1 (BEEBE et al.) 27 February 2001 (2		27.02.2001), see entire document.	1-86
A US 2002/0074227 A1 (NISCH et al.) 20 June 2002 (2		20.06.2002), see entire document.	1-86
Further	documents are listed in the continuation of Box C.	See patent family annex.	
"A" document defining the general state of the art which is not considered to be		"T" later document published after the inte date and not in conflict with the applic	
		principle or theory underlying the inve	
		"X" document of particular relevance; the considered novel or cannot be considered to the considered t	claimed invention cannot be red to involve an inventive step
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		when the document is taken alone "Y" document of particular relevance; the	claimed invention cannot be
		considered to involve an inventive ster combined with one or more other such	o when the document is a documents, such combination
"O" document referring to an oral disclosure, use, exhibition or other means		being obvious to a person skilled in th	
priority date claimed		"&" document member of the same patent family	
Date of the actual completion of the international search		Date of mailing of the international search report	
12 January 2004 (12.01.2004)		2 2 JAN 2004	
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US		Authorized officer	
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